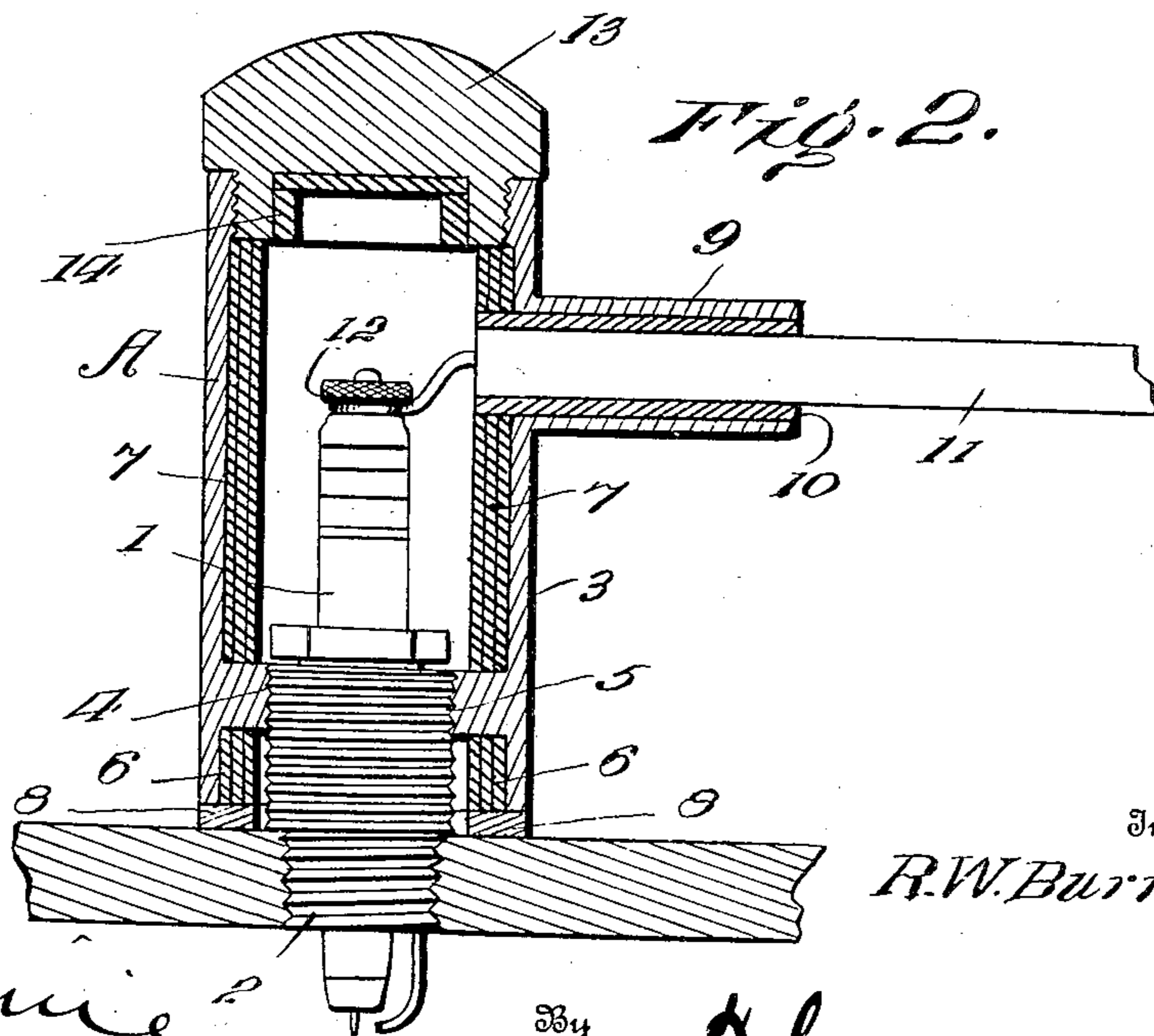
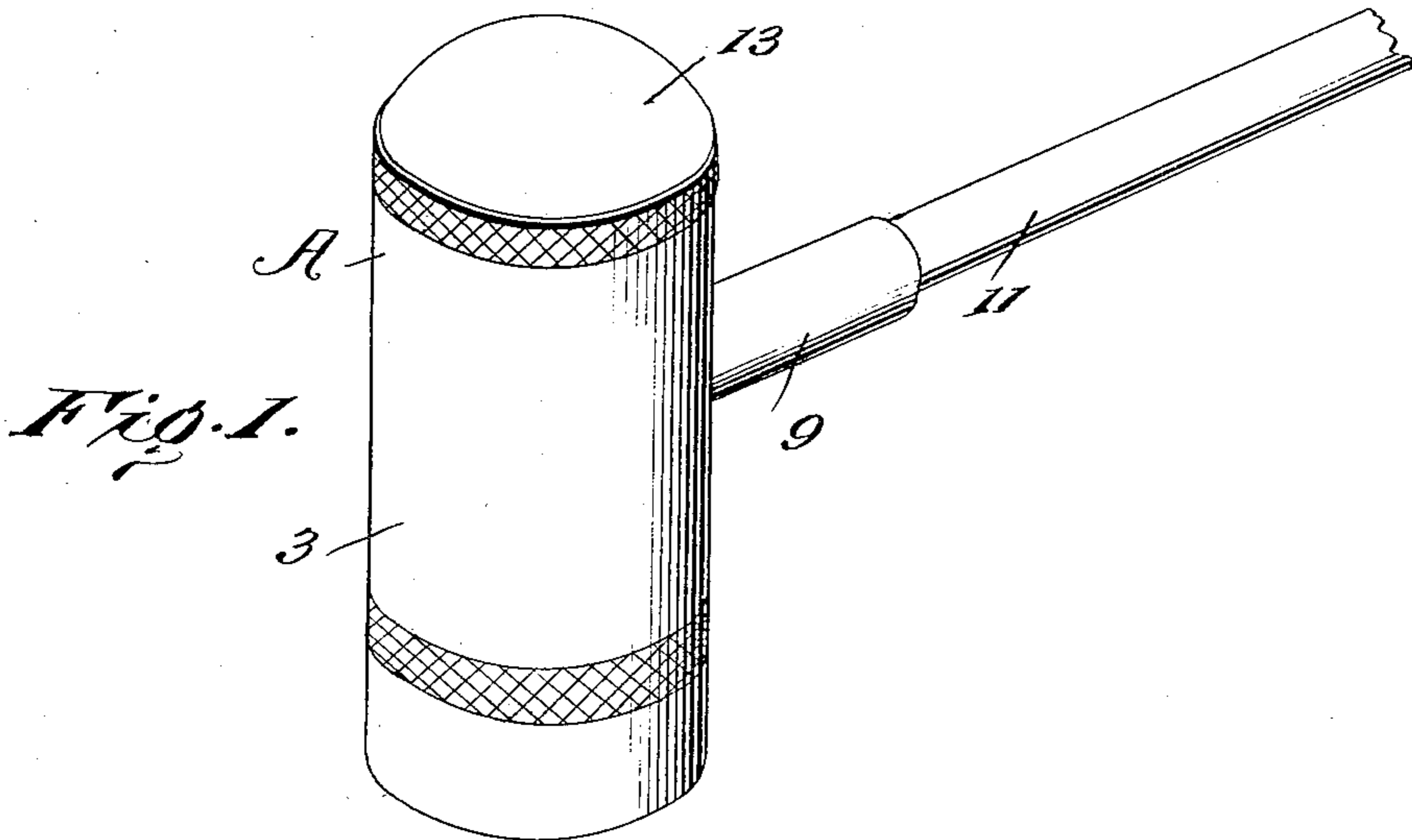


R. W. BURNHAM.
 PROTECTING HOOD FOR SPARK PLUGS.
 APPLICATION FILED AUG. 3, 1908.

920,429.

Patented May 4, 1909.



Witnesses
J. J. J. J.
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By

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UNITED STATES PATENT OFFICE.

RALPH W. BURNHAM, OF OCEAN POINT, MAINE.

PROTECTING-HOOD FOR SPARK-PLUGS.

No. 920,429.

Specification of Letters Patent.

Patented May 4, 1909.

Application filed August 3, 1908. Serial No. 446,713.

To all whom it may concern:

Be it known that I, RALPH W. BURNHAM, citizen of the United States, residing at Ocean Point, in the county of Lincoln and State of Maine, have invented certain new and useful Improvements in Protecting-Hoods for Spark-Plugs, of which the following is a specification.

The object of this invention is to provide a simple, durable and efficient device for protecting spark plugs of gasoline engines by rendering the same water and moisture proof, and the invention consists in certain constructions, arrangements, and combinations of the parts that I shall hereinafter fully describe.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings in which:

Figure 1 is a perspective view of my improved protecting hood for spark plugs; and, Fig. 2 is a longitudinal sectional view thereof illustrating it applied.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

Referring to the drawings, the numeral 1 designates a spark plug of any desired construction or design, formed with the ordinary exterior threads 2 by which it may be screwed into the wall of the engine cylinder.

A designates my improved protecting hood which may be constructed of brass or any other metal or material and which comprises a cylindrical body portion 3 adapted to be slipped over the spark plug 1, the said body portion being formed, in the present instance, intermediate its ends with interior threads 4 designed to engage the exterior threads 5 on the plug 1 so that the hood may be screwed thereon and securely held in place. It is to be particularly noted that the hood 3 is provided in the lower end of its body portion with a lining 6 that may be formed of any suitable water proof material such as cork in one, two, or any number of layers as desired, and the said body portion is similarly lined above or on the other side of the interior threads 4, as clearly illustrated in the drawing.

8 designates a gasket of leather, rubber or the like which is preferably interposed between the cylinder wall and the adjoining end of the body portion 3 of the hood. The hood 3 also embodies a tubular arm 9 which projects laterally from the body portion 3, and which is also preferably lined with cork or the like as indicated at 10, said arm being designed to receive the conductor 11 which may be slipped therein and held securely in place, the inner end of the conductor being secured to the binding post 12 of the spark plug. In order that the conductor may be securely attached to the terminal or the binding post of the spark plug, and that the interior of the plug may be inspected at any time to determine whether or not a good connection has been effected, the body portion of the head is provided at its outer end with a detachable cap 13 which, in the present instance, has screw threaded engagement therewith, and is provided with a lining 14 of cork or the like.

As is well known, considerable difficulty has been experienced in spark plugs for gasoline engines particularly in connection with motor boats, owing to the fact that waves splashing over the boat will often strike the mica washer of an exposed plug and cause a short circuit and thereby often putting the engine entirely out of commission unless the operator happens to have an extra plug which may be substituted for the dampened one. Not only is this contingency liable to occur owing to the waves striking the motor boat, but in damp or foggy weather moisture is liable to collect upon the plug and also produce a short circuit. It is obvious that the first of these contingencies mentioned might be avoided merely by covering the plug, but the same would not hold good as to the effect of moisture produced by rainy or foggy weather. And it will be seen from the foregoing description in connection with the accompanying drawings that by the provision of waterproof or cork linings of the hood A, the spark plug will be effectually protected and all liability to short circuiting from dampness will be obviated.

Having thus described the invention, what is claimed as new is:

1. A protecting hood for spark plugs em-

bodying a cylindrical body portion adapted to be slipped over and incase a spark plug, and waterproof linings secured in said body portion.

- 5 2. A protecting hood for spark plugs embodying a cylindrical body portion adapted to be slipped over and incase a spark plug and a tubular arm projecting laterally from

the body portion, the body portion and arm being provided with waterproof linings. 19

In testimony whereof I affix my signature in presence of two witnesses.

RALPH W. BURNHAM.

Witnesses:

FRANK H. ALBEE,
O. W. BAKER.